****

**Africa Research in Sustainable Intensification for the Next Generation  
ESA-project**

**Integrating Livestock Technologies in intensifying Mixed Farming Systems**

Filed activities report  
01 May 2019 – 31 May 2019

# 1.0 Introduction:

This activity is concerned with Integrating Livestock Technologies in intensifying Mixed Farming Systems of Babti district through dairy cattle and poultry nutrition. The dairy research activities are being conducted in Long /Bashnet and Hysum villages in Babati district. The poultry research activities is being conducted in Matufa and Seloto villages in Babati district; Mwanya village in Kiteto and Mlali village in Kongwa districts. The main objective of the research project is better use of locally processed and formulated feeds for improved dairy cattle and poultry. The diets are being tested with improved breeds of both dairy cattle and poultry. The focus of our research activities May 2019 was as follows:

# 2.0 Dairy nutrition experiment

Farmer identification and sensitization about project activities was carried out on 6-9 May 2019 in Long/Bashnet and Hysum villages. This activity focused on current Africa RISING beneficiaries. It included assessing current farmer husbandry and feeding practices, existing breeds and numbers of animals amongst other issues. We assessed the following aspects of the farms;

* Availability of Napier grass in the study sites
* Availability of crop residue (maize stover and bean haulms) for use in experiments.
* Types of animal breeds on farms
* Productivity of animals on farms
* Type of housing and availability of feed troughs for dairy cattle on farms

## 2.1 Key observations

* There is enough Napier grass for the experiment on farms. Napier grass is planted is sole plots (Figure 1) and or intercropped with other crops either in contours or boundaries (Figure 2).

|  |  |
| --- | --- |
| C:\MARWA\AFRICA RISING\2019 (IITA-ILRI)\Photo Field assesment may 2019\PICT0270.JPG |  |
| Figure 1: Napier plot of Wema Ako at Bashnet village | Figure 2: Napier grass planted in contours on John Qwari’s farm at Hysum-Seloto village |

* Crop residues (maize stovers and bean haulms)
* Maize stovers are available in about 25% of the surveyed farmers since currently the maize harvesting season is ongoing.
* Bean haulms are not available now. However, most farmers are expected to start harvesting by mid-July to August 2019. Some few farmers were identified to and requested to harvest and store beans haulms for the experiments. Maria Yakobo at Hysum village is already bulking bean haulms for use (Figure 3).
* Feed troughs contractions need more emphases as About 50% of the identified farmers were having poor feed troughs and some were not having any all and fed their animals at the ground e.g. Qwari farm, Hysum-Seloto village (Figure 4).

|  |  |
| --- | --- |
|  |  |
| Fig 4: lack of feed trough: feed cattle on the ground on John Qwari’s farm in Hysum-Seloto village | Figure 3: Bean haulms store on Maria Yakobo’s farm in Hysum village |

# 3.0 Poultry nutrition experiment

Field trip to sensitize farmers about project activities and studying current situation on farmers was held 10-11 May 2019 in Babati and jointly carried out with UDOM in Kiteto on 17-19 July 2019. The field assessments focused on current farmer poultry practices so we can determine how to set up experiments with farmers

## 3.1 Key observations

* Farmers were ready participate in project activities
* There is need to emphasis to farmers the imp0rtnace of having poultry housing.
* Poultry feed ingredients for experimental diets are available however more effort is needed to explore the availability of more Grilicidia leaves.
* Grilicidia leaves are now being sourced in Babati in collaboration with Regreening Initiative (one of livestock partners). The Gliricida leaves are being dried using two methods – (i) by direct sunlight (Figure 5) and (ii) using a solar drier (Figure 6) in order to retain as much of the nutrients as possible. The drying process has been set up at Babati Livestock office (Figure 5 and 6) so that by the time of the experiment, there will be enough Gliricidia leaves for diet formulation. for feed rationing.

|  |  |
| --- | --- |
|  |  |
| Fig 5: Gliricidia harvested in bulk and Partially dried under the sun | Fig 6: The solar drier and Gliricidia being dried under solar drier. |

# 4.0 Meetings and training sessions

## 4.1 Arusha planning meeting

The planning meeting was held on 13-14th May 2019 in Arusha. It was a combined meeting between ILRI and UDOM. The planning resulted in an integrated workplan for the year 2019 (Appendix 1).

## 4.2 Training

A joint training with UDOM was done in Kiteto on 19th May 2019. The topic covered were

* Diseases – UDOM
* Chick rearing – UDOM
* Poultry housing – ILRI
* Poultry feeding – ILRI

A total of 20 farmers were trained (12 male and 8 females)- Appendix 2

## 4.3 Data clerk recruiting

Six qualified youth were identified and recruited form experimental sites/ villages to collect data form experimental farms

Two youth were recruited for dairy nutrition study

1. Ally Mohamedi, Long village-Babati
2. Gastor Peter Meena, Hysum village - Babati.

Four youth were recruited for poultry nutrition study

1. Olais Efraim Lukumai, Seloto village-Babati
2. Beatrice Hendry Joseph, Matufa village-Babati
3. Mustafa Juma Mabundo, Mlali village-Kongwa
4. Majid Athuman Habibu, Mwanya village-Kiteto

|  |  |  |
| --- | --- | --- |
| **Table 1: A summary of activities for May 2019** | | |
| Date | Activity | Site |
| 6-9th May 2019 | Field visits in dairy study sites | Long and Hysum villages – Babati district |
| 10-11th May | Field visits in Poultry study sites | Matufa, Seloto and Galapo villages in Babati district |
| 13-14th May 2019 | Livestock planning meeting | Arusha |
| 17th May 2019 | Inception meeting | Kiteto |
| 18th May 2019 | Field visits in poultry project site | Mwanya village - Kiteto |
| 19th May 2019 | Field visits in poultry project site | Mwanya village - Kiteto |
| 21-31th May 2019 | Sourcing of poultry feeds | Babati, Kongwa, Kiteto |

|  |
| --- |
| **Appendix 1: ILRI-UDOM Integrated work plan for the year 2019** |
|  |

|  |
| --- |
| **Appendix 2: Attendance list for trainee at Mwanya village-Kiteto** |
| C:\MARWA\AFRICA RISING\2019 (IITA-ILRI)\KITETO\Training attendance May 2019.jpg |